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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/717,493 | 11/21/2003 | Yuan Lin | BHT-3088-104 | 7595 |
| 7590 | 07/20/2005 | | EXAMINER | |
| BRUCE H. TROXELL SUITE 1404 5205 LEESBURG PIKE FALLS CHURCH, VA 22041 | | | PHILOGENE, HAISSA | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2828 | |

DATE MAILED: 07/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------------|------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/717,493 | LIN, YUAN | |
| | Examiner Haissa Philogene | Art Unit 2828 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 21 November 2003.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-15 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-15 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 21 November 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>11/21/03</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Paterson, Patent No. 4,717,868.

Peterson discloses in Fig.1 a strip light device, comprising: an illuminating unit (11) including a plurality of illuminators directly and electrically coupled in series; and a constant current stabilization unit (remaining elements of circuit 10) having one end (via output terminal 19) electrically coupled to the illuminating unit (11) and the other end (via source of output transistor Q5) coupled to ground, wherein the constant current stabilization unit is operative to supply a constant current to each of the illuminators (see Col.3, lines 6-52 and Col.6, lines 33-40); wherein each of the illuminators is a LED or bulb (see Col.1, lines 10-13 and Col.2, lines 38-42); wherein the constant current stabilization unit is a current stabilizer, i.e., as the impedance of driving element (11) increases, the duty cycle of the current flowing through the driven element increases, thereby maintaining a substantially constant current through the driven element.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson in view of Incerti, Patent No. 6,218,785.

Peterson discloses the claimed invention substantially as explained above except for the constant current stabilization unit comprising a current stabilizer and a current regulator being resistor means. Incerti discloses a lighting device having a strip light (2) with one or more LEDs and a constant current stabilization unit (30) which comprises a current stabilizer (31) and a current regulator being resistor means (32). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to employ the current stabilizer and current regulator as taught by Incerti into the Peterson type device, because it would ensure a prevention of electrical and thermal overloads in the LED so that the latter enjoys a long working life and is thoroughly reliable.

Claims 3, 4 and 8-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson in view of Bowman et al., Patent No. 6,791,283.

As per claims 3 and 4, Peterson discloses the claimed invention substantially as explained above except for the constant current stabilization unit comprising a voltage stabilizer and a current regulator. Bowman discloses a strip light device (102a-n) having a constant current stabilization unit which comprises a voltage stabilizer (104) and a current regulator (106). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to employ the voltage stabilizer and current

regulator as taught by Bowman into the Peterson type device, because it would allow a dual-mode operation as to control LED current to be substantially constant while battery voltage deteriorates and to allow LED current to decrease while maintaining battery voltage substantially constant.

As per claims 8, 13 and 14, Peterson in view of Bowman discloses the claimed invention substantially as explained above. Further, Bowman discloses in Fig.3A a circuitry module (301) having electronic circuitry readable as constant current stabilization unit, formed of at least voltage stabilizer (104) and current regulator (106), assembled on one or both sides of PCB (302); and the LED (102) coupled therewith being mounted on the circuit board (302), readable as of COB type (see also Col.8, line 8-Col.9, line 11).

As per claims 9-12, Peterson in view of Bowman discloses the claimed invention substantially as explained above except for the SMD type, bare dice encapsulation type, printed carbon film type. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize SMD type, bare dice encapsulation type and printed carbon film type in lieu of COB type in order to implement the mounting of various elements on a PCB, since Applicant has not disclosed that the SMD type, bare dice encapsulation type, printed carbon film type solve any stated problem and it appears that COB type would perform equally well with the SMD type, bare dice encapsulation type or printed carbon film type.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson in view of Eisler, Patent No. 3,033,970.

Peterson discloses the claimed invention substantially as explained above except for the wire being of a flat metal foil type. However, this feature is well-known in the wiring art as evidenced by Eisler which discloses in Fig.2 a flat metal strip 18 made of flattened wires of metal foil (see Col.4, lines 54-62). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to employ the wire as taught by Eisler into the Peterson type device. This can be done by replacing the Peterson's wire with the Eisler's wire. Thus, it would ensure a good heat transfer function with low cost in production.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lewis et al., Patent No. 5,152,599 ; Dessens et al., Patent No. 4,673,864 ; Kim, Patent No. 6,346,777 ; Okuno, Patent No. 4,298,869.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haissa Philogene whose telephone number is (571) 272-1827. The examiner can normally be reached on 8:30 A.M.-6:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MinSun Harvey can be reached on (571)272-1835. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

hp

Haisa Phlogene
Primary Examiner
A.U. 2821